

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

-
1. (canceled)
 2. (canceled)
 3. (previously presented) An isolated DNA encoding the protein of claim 35.
 4. (previously presented) The DNA of claim 3 comprising the coding region of the nucleotide sequence of SEQ ID NO: 1.
 5. (previously presented) A vector into which the DNA of claim 3 is inserted.
 6. (previously presented) A host cell transformed with the vector of claim 5.
 7. (previously presented) A method for producing a protein, wherein said method comprises the steps of culturing a host cell containing the DNA of claim 3, and collecting from the cell or its culture supernatant, a recombinant protein expressed from the DNA within the cell.
 8. (canceled)
 9. (previously presented) A peptide fragment of the protein of claim 32, wherein the peptide fragment comprises the C-terminal 14 amino acids having the amino acid sequence of SEQ ID NO: 9.
 10. (canceled)
 11. (previously presented) A method for screening a compound that binds to the protein of claim 35, comprising the steps of:
 - (a) contacting a test sample with the protein or a peptide fragment thereof comprising the C-terminal 14 amino acids having the amino acid sequence of SEQ ID NO: 9,

(b) detecting the binding activity between the test sample and the protein or the peptide fragment thereof, and

(c) selecting a compound that has an activity to bind to the protein or the peptide fragment thereof.

12. (canceled)

13. (canceled)

14. (canceled)

15. (canceled)

16. (currently amended) An isolated polynucleotide encoding the protein peptide fragment of Claim 149.

17. (canceled)

18. (previously presented) An A β production regulator, comprising the protein of claim 35 as an active ingredient.

19. (currently amended) A drug for treating a disease that causes accumulation of A β in the brain, wherein said drug comprises the protein of claim 235 as an active ingredient.

20. (original) The drug of claim 19, wherein said disease that causes accumulation of A β in the brain is selected from the group consisting of senile dementia, Alzheimer's disease, Down's syndrome, hereditary cerebral hemorrhage, and cephalic contusion.

21. (canceled)

22. (canceled)

23. (canceled)

24. (previously presented) A kit for screening a compound that promotes or inhibits peptidase activity of the protein of claim 35, wherein said kit comprises the protein of claim 35.

25. (previously presented) The kit of claim 24, further comprising a substrate of the protein of claim 35.

26. (previously presented) The kit of claim 25, wherein said substrate is brain APP.

27. (canceled)

28. (canceled)

29. (canceled)

30. (canceled)

31. (canceled)

32. (previously presented) The protein of claim 35, wherein said protein comprises the C-terminal 14 amino acids of SEQ ID NO: 9.

33. (canceled)

34. (previously presented) The partial peptide of claim 9, wherein said partial peptide consists of the amino acid sequence of SEQ ID NO: 9.

35. (previously presented) An isolated protein having peptidase activity towards brain APP, wherein said protein comprises an amino acid sequence of any one of SEQ ID NOS: 2 to 4 or a variant of any of SEQ ID NOS: 2 to 4 in which no more than 30 amino acids are replaced, deleted, inserted, and/or added.

36. (previously presented) The protein of claim 35 comprising the amino acid sequence of any one of SEQ ID NOS: 2 to 4.

37. (new) An isolated peptide comprising at least 7 amino acids of SEQ ID NO: 9.

Appl. No. 09/980,881

Amdt. dated October 1, 2003

Amendment under 37 CFR 1.116 Expedited Procedure

Examining Group

PATENT

38. (new) An isolated peptide variant of SEQ ID NO: 9 in which no more than 5 amino acids are replaced, deleted inserted and/or added.
